

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A process for preparing at least one partial oxidation and/or ammonoxidation product of hydrocarbon by subjecting at least one saturated hydrocarbon H to a heterogeneously catalyzed dehydrogenation in the gas phase to form a product gas mixture A which comprises at least one partially dehydrogenated hydrocarbon H, leaving constituents present in the product gas mixture A, other than the saturated hydrocarbon H and other than the partially dehydrogenated hydrocarbon H therein, or partly or fully removing them to obtain a product gas mixture A', and subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one heterogeneously catalyzed partial oxidation and/or ammonoxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A', which comprises subjecting the product gas mixture A, the product gas mixture A' and/or the gas mixture B, before the at least one heterogeneously catalyzed partial oxidation and/or ammonoxidation, to at least one mechanical separating operation by which solid particles present in these gas mixtures can be removed.
2. (Original) A process as claimed in claim 1, wherein the saturated hydrocarbon H is propane, and the heterogeneously catalyzed partial oxidation of the partially dehydrogenated hydrocarbon H is the partial oxidation of propene to acrolein and/or acrylic acid.
3. (Original) A process as claimed in claim 1, wherein the saturated hydrocarbon H is isobutane, and the heterogeneously catalyzed partial oxidation of the partially dehydrogenated hydrocarbon H is the partial oxidation of isobutene to methacrolein and/or methacrylic acid.
4. (Original) A process as claimed in claim 1, wherein the saturated hydrocarbon H is propane, and the heterogeneously catalyzed partial ammonoxidation of the partially dehydrogenated hydrocarbon H is the partial ammonoxidation of propene to acrylonitrile.

5. (Original) A process as claimed in claim 1, wherein the saturated hydrocarbon H is isobutane, and the heterogeneously catalyzed partial ammoxidation of the partially dehydrogenated hydrocarbon H is the partial ammoxidation of isobutene to methacrylonitrile.

6. (New) A process as claimed in claim 1, wherein constituents present in the product gas mixture A, other than the saturated hydrocarbon H and other than the partially dehydrogenated hydrocarbon H therein, are partly or fully removed to obtain a product gas mixture A'.

7. (New) A process as claimed in claim 1, comprising subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one heterogeneously catalyzed partial oxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A'.

8. (New) A process as claimed in claim 1, comprising subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one heterogeneously catalyzed partial ammoxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A'.

9. (New) A process as claimed in claim 1, comprising subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one heterogeneously catalyzed partial oxidation and ammoxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A'.

10. (New) A process as claimed in claim 6, comprising subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one heterogeneously catalyzed partial oxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A'.

11. (New) A process as claimed in claim 6, comprising subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one

heterogeneously catalyzed partial ammoxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A'.

12. (New) A process as claimed in claim 6, comprising subjecting product gas mixture A and/or product gas mixture A', as a constituent of a gas mixture B, to at least one heterogeneously catalyzed partial oxidation and ammoxidation of the at least one partially dehydrogenated hydrocarbon H present in the product gas mixture A and/or product gas mixture A'.

13. (New) A process as claimed in claim 7, wherein the saturated hydrocarbon H is propane, and the heterogeneously catalyzed partial oxidation of the partially dehydrogenated hydrocarbon H is the partial oxidation of propene to acrolein and/or acrylic acid.

14. (New) A process as claimed in claim 7, wherein the saturated hydrocarbon H is isobutane, and the heterogeneously catalyzed partial oxidation of the partially dehydrogenated hydrocarbon H is the partial oxidation of isobutene to methacrolein and/or methacrylic acid.

15. (New) A process as claimed in claim 8, wherein the saturated hydrocarbon H is propane, and the heterogeneously catalyzed partial ammoxidation of the partially dehydrogenated hydrocarbon H is the partial ammoxidation of propene to acrylonitrile.

16. (New) A process as claimed in claim 8, wherein the saturated hydrocarbon H is isobutane, and the heterogeneously catalyzed partial ammoxidation of the partially dehydrogenated hydrocarbon H is the partial ammoxidation of isobutene to methacrylonitrile.

17. (New) A process as claimed in claim 10, wherein the saturated hydrocarbon H is propane, and the heterogeneously catalyzed partial oxidation of the partially dehydrogenated hydrocarbon H is the partial oxidation of propene to acrolein and/or acrylic acid.

18. (New) A process as claimed in claim 10, wherein the saturated hydrocarbon H is isobutane, and the heterogeneously catalyzed partial oxidation of the partially

dehydrogenated hydrocarbon H is the partial oxidation of isobutene to methacrolein and/or methacrylic acid.

19. (New) A process as claimed in claim 11, wherein the saturated hydrocarbon H is propane, and the heterogeneously catalyzed partial ammoxidation of the partially dehydrogenated hydrocarbon H is the partial ammoxidation of propene to acrylonitrile.

20. (New) A process as claimed in claim 11, wherein the saturated hydrocarbon H is isobutane, and the heterogeneously catalyzed partial ammoxidation of the partially dehydrogenated hydrocarbon H is the partial ammoxidation of isobutene to methacrylonitrile.